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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/067,460

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Brian N. Sedlak

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SCHWEGMAN, LUNDBERG & WOESSNER/OPEN TV

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EXAMINER

NGUYEN BA, HOANG VU A

ART UNIT

PAPER NUMBER

2421

NOTIFICATION DATE

DELIVERY MODE

05/29/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@slwip.com

scape@slwip.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/067,460	<b>Applicant(s)</b> SEDLAK ET AL.	
	<b>Examiner</b> Hoang-Vu A. Nguyen-Ba	<b>Art Unit</b> 2421	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is responsive to Amendment filed on March 11, 2009.
2. Claims 1-14 are pending. Claims 1, 5 and 9 are independent claims.

### ***Response to Amendments***

3. Per Applicants' request, Claims 2-4 and 6-9 have been amended.

### ***Response to Arguments***

4. Applicants' arguments in the Remarks have been fully considered but they moot in view of the new grounds of rejection presented herein.

### ***Claim Rejections – 35 USC § 103***

5. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,572,442 to Schulhof et al. ("Schulhof") in view of U.S. Patent No. 5,956,716 to Kenner et al. ("Kenner") and further in view of U.S. Patent No. 5,566,175 to Davis (?).

### **Claim 1**

Schulhof discloses *a method for transmitting requested content items in a broadband transmission system, said method comprising:*

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*receiving requests for a plurality of content items on an upstream path of said broadband transmission system* (see at least 10:35-41);

*creating a list of said content items* (see at least 10:35-41).

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

*creating a request count for each content item of said plurality of content items based on said requests received* (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof because the use of request count for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner further discloses:

*sorting said requests using said request count* (Kenner; see at least 5:32-38; 9:55-67; 10:40-57);

*content items with a higher request count* (Kenner; see at least 9:55-60);

*content items with a lower request count* (Kenner; see at least 9:61-64).

Schulhof-Kenner does not explicitly disclose *determining an associated retransmit rate for each of said content items*, [that the content items with a higher request count] *receiving a higher associated retransmission rate and repeatedly broadcasting the content items at said associated retransmit rate*.

However, in an analogous art, Redmond discloses a server/client media file distribution system wherein a media file server is adapted to monitor incoming user request messages and determine an overall throughput value based on the current user's transmission speed which can be automatically adjusted and used to optimally transmit a given media file to one or more clients (5:28-63).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count taught by Kenner as an incoming user request message in Redmond to automatically adjust the transmission speed and thereby optimally transmit media files with higher request count.

### **Claim 2**

The rejection of base claim 1 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said request count is a number of requests received during a predefined time period for each content item of said plurality of content items* (Schulhof; see at least 10:52 – 11:5).

### **Claim 3**

The rejection of base claim 1 is incorporated. The combination Schulhof- Kenner-Redmond further discloses *removing said content item from said list of content items if said request count is equal to or less than a predetermined content access count* (Schulhof; see at least 11:10 – 41).

### **Claim 4**

The rejection of base claim 1 is incorporated. The combination Schulhof- Kenner-Redmond does not specifically disclose:

*grouping content items with a request count greater than or equal to a second predetermined access count into a transmit group.* However, this grouping is deemed inherent to Schulhof since Schulhof teaches that the information request manager automatically clears the bins of those program materials that never have more than 100 requests at any given time (see at least 11:10-15). By doing so, the programs materials that have more than 100 requests are grouped into a group of program materials that are popular and not to be discarded. Therefore, Schulhof does indeed teach grouping content

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items with a request count greater than or equal to a second predetermined access count (i.e., 100) into a transmit group.

*determining a group retransmit rate for said transmit group (see discussion in Claim 1); and*

*repeatedly broadcasting the transmit group at said retransmit rate (see discussion in Claim 1).*

### **Claim 5**

Schulhof discloses *a method for optimizing transmit bandwidth utilization in a broadband transmission system employing a content item list, said method comprising:*

*receiving requests on an upstream path of said broadband transmission system for transmission of a plurality of content items (see at least 6:24-40; 7:34-53);*

*adding one content item of said plurality of content items to said content item list if said one content item is not in said content item list (see at least 10:42 – 11:41).*

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

*determining a rate of request for each content item contained in said content item list based on said request received (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof because the use of rate of request for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner further discloses:

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*deleting content items from said content list for which the number of requests during a predefined time are less than or equal to a predefined rate of request (Schulhof; see at least 10:42 – 11:41).*

Schulhof-Kenner does not explicitly disclose *determining an associated retransmit rate for each of said content items in said content item list wherein said associated retransmit rate is based on said rate of request and repeatedly broadcasting the content items at said associated retransmit rate.*

However, in an analogous art, Redmond discloses a server/client media file distribution system wherein a media file server is adapted to monitor incoming user request messages and determine an overall throughput value based on the current user's transmission speed which can be automatically adjusted and used to optimally transmit a given media file to one or more clients (5:28-63).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count taught by Kenner as an incoming user request message in Redmond to automatically adjust the transmission speed and thereby optimally transmit media files with higher request count.

### **Claim 6**

The rejection of base claim 5 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said content items with a higher rate of request are transmitted more frequently than content items with a lower rate of request (Schulhof; see at least 11:16-41).*

### **Claim 7**

Rejections of base claim 5 and intervening claim 6 are incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said broadcasting further comprises*

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*grouping of a plurality of said content items into a transmit package wherein said transmit package is of a predetermined maximum size (Schulhof; see at least 10:66 – 11:5).*

### **Claim 8**

Rejections of base claim 5 and intervening claim 6 are incorporated. The combination Schulhof-Kenner-Redmond further discloses *merging said repeatedly broadcasting content items with other transmitted data* (see discussion regarding repeatedly broadcasting in Claims 1 and/or 5).

### **Claim 9**

Schulhof discloses *a system for optimizing bandwidth utilization in a broadband transmission system, said system comprising:*

*a first database containing a plurality of content items* (see at least FIG. 1, databases 14, 15, 16, 18);

*a second database containing user request information for said content items* (see at least FIG. 1, bins in the Information Request Manager software);

*a transmit unit* (see at least FIG. 1, device 26);

*a server computer* (see at least FIG. 1, system 10).

Schulhof does not specifically disclose the remaining features of the claim.

However, in an analogous art, Kenner discloses:

*a software that processes said user request information for said content items, determines a rate of request for each content item based on said user request information received* (see at least 5:32-35; 5:65; 9:55-65; 11:4-24; 11:33-37; 13:56-57; 14:19-22).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count for a content item as taught in Kenner in Schulhof



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because the use of rate of request for a content item would help determine which content item is frequently requested in order to optimize the distribution of these content items.

Schulhof-Kenner does not specifically disclose *determines an associated retransmit rate for each content item of said plurality of content items in said first database, said associated retransmit rate responsive to said rate of request for each content item*; and

*repeatedly broadcasts the transmitted content items via the transmit unit to a downstream requesting transceiver display.*

However, in an analogous art, Redmond discloses a server/client media file distribution system wherein a media file server is adapted to monitor incoming user request messages and determine an overall throughput value based on the current user's transmission speed which can be automatically adjusted and used to optimally transmit a given media file to one or more clients (5:28-63).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the request count taught by Kenner as an incoming user request message in Redmond to automatically adjust the transmission speed and thereby optimally transmit media files with higher request count.

#### **Claim 10**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said transmit unit comprises a television transmitter* (Schulhof; see at least FIG.1, device 28).

#### **Claim 11**

The rejection of base claim 9 is incorporated. The combination Schulhof-Keller-Redmond further discloses *wherein said transmit unit comprises a server computer connected to a network* (Schulhof; see at least FIG. 1, system 10).

### **Claim 12**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *a third database containing only those of said content items corresponding to said user request information for said content items* (Schulhof; see at least 10:35 – 11:41, e.g., various bins in the Information Request Manager).

### **Claim 13**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said associated retransmit is further responsive to available bandwidth for content item broadcast* (Schulhof; see at least 11:10-41).

### **Claim 14**

The rejection of base claim 9 is incorporated. The combination Schulhof-Kenner-Redmond further discloses *wherein said associated retransmit rate of transmission is further responsive to a duration of each content item of said plurality of content items in said first database* (Schulhof; see at least 11:10-41).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (571) 272-3701. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:30 pm.

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If attempts to reach the examiner are unsuccessful, the examiner's supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2400 Group receptionist (571) 272-2400.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Hoang-Vu Antony Nguyen-Ba/

Primary Examiner, Art Unit 2421

May 23, 2009

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